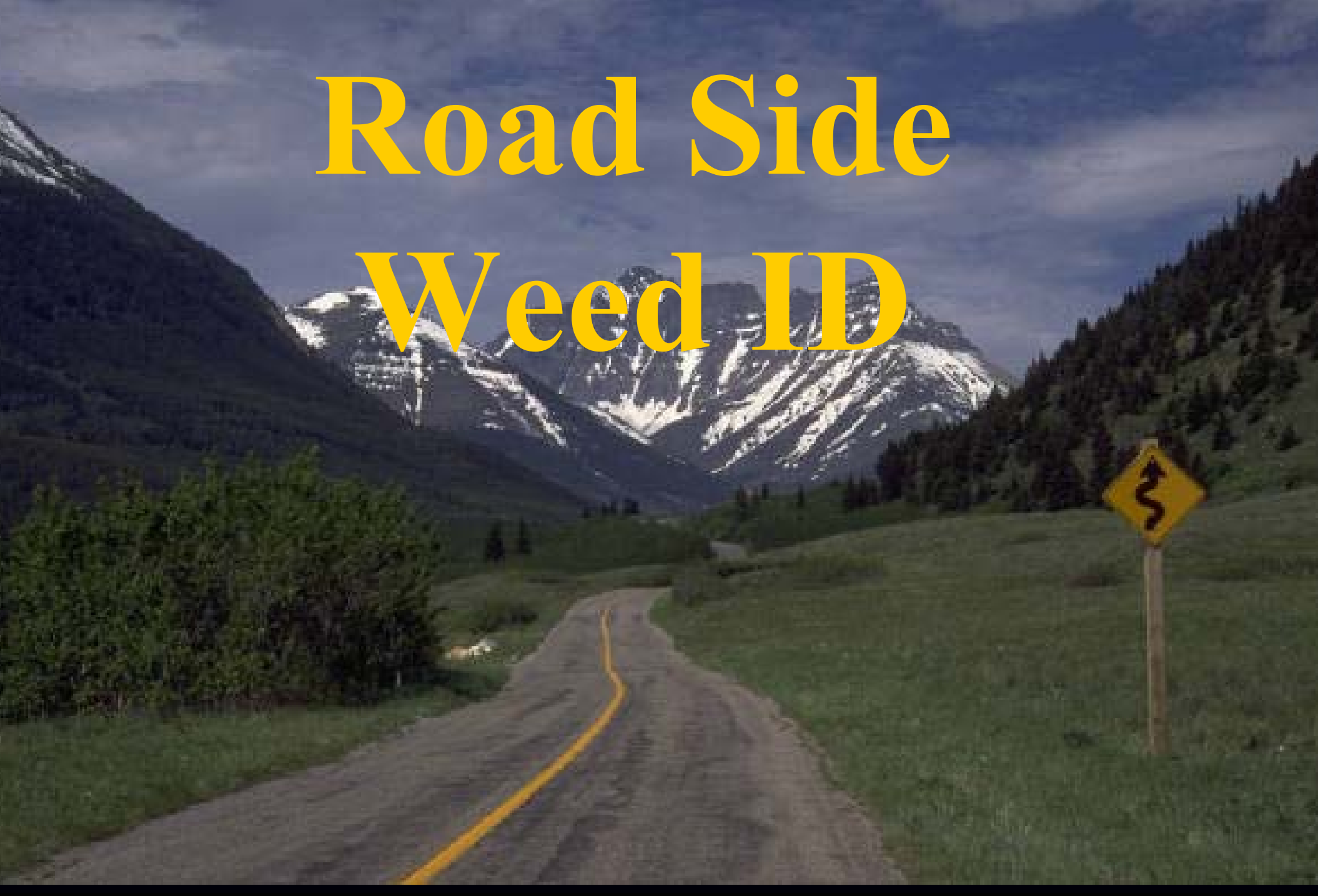


Road Side Weed ID



Outline

- **What is a noxious weed**
- **Roadside impacts**
- **Control**
- **Quick Weed ID**

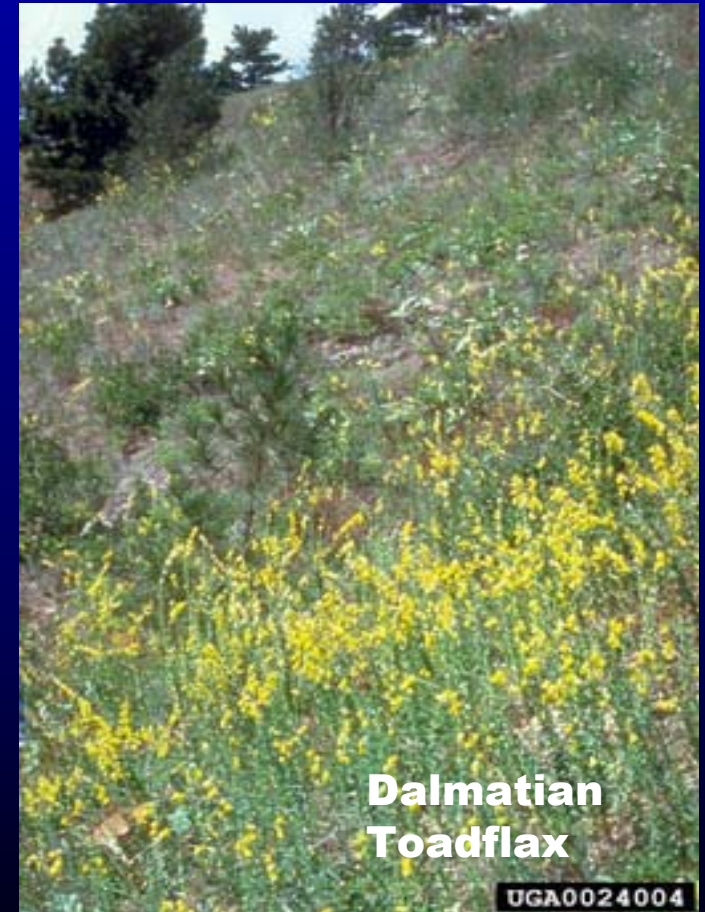


Definitions:

- **Obnoxious Weeds:**
 - Plants that are a pain in the @#\$@!
 - Can be controlled or managed relatively easily
- **Non Native Weeds:**
 - Plants that have been introduced to a “native” plant community either by contamination or by intentional propagation
- **Invasive Weeds:**
 - Aggressive plants
 - Take over a “native” plant community
 - May have been intentionally introduced
 - Could also be natives

What is a Noxious Weed?

- **Non-native, Invasive Plants**
 - Destructive
 - Competitive
 - **Difficult to control**
- **Botanical Characteristics**
 - Perennials
 - Prolific seed producers
 - Rhizomes



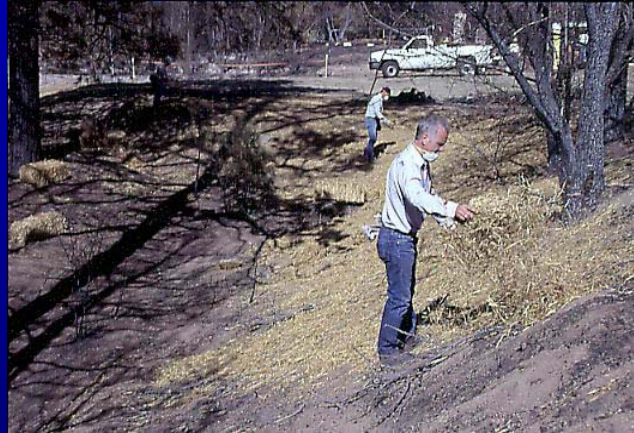
Road Side Impacts of Noxious Weeds

- Fire hazard
- Harbor or hide wildlife
- Obstruct view of intersections
- Provide new infestations
- Increase spread
- Cause physical hazards
- Increase soil erosion
- Reduce amount of water held in soil

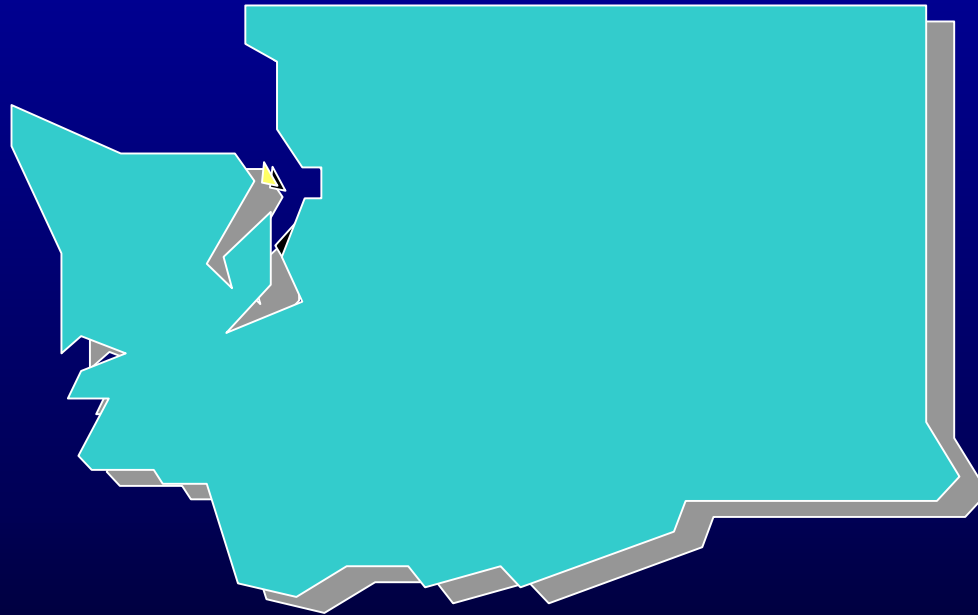


Control Options

- **Site Specific**
- **IPM**
 - **Cultural**
 - **Mechanical**
 - **Biological**
 - **Chemical**

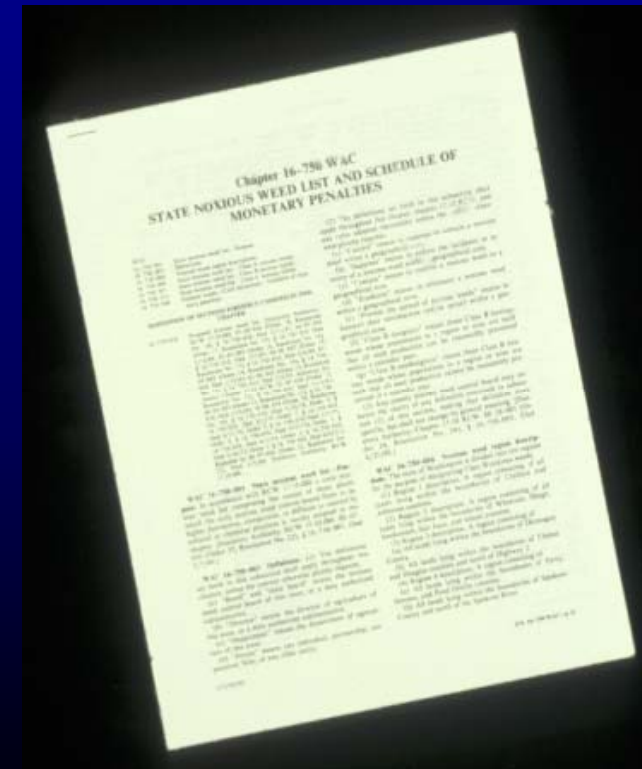


Noxious Weeds in Washington



The Weed Laws

- **17.10 RCW**
 - **Limit economic loss due to the presence and spread of noxious weeds**
- **16.750 WAC**
 - **Weed list and Schedule of monetary penalties**



Weed Classes


A

B

C

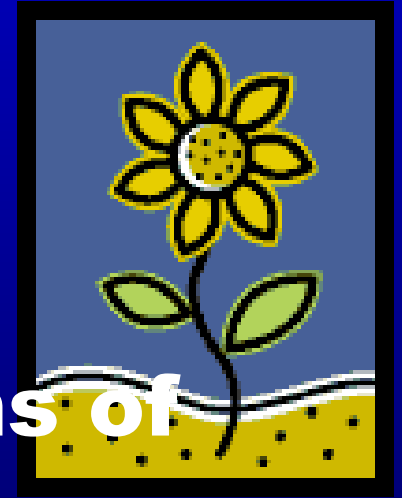
CLASS “A” WEEDs

- **ARE**
 - **Non-native**
 - **Limited Distribution**
- **Goal**
 - **Prevention of new infestations**
 - **Eradication of infestations**



High Priority

CLASS “B” WEEDs



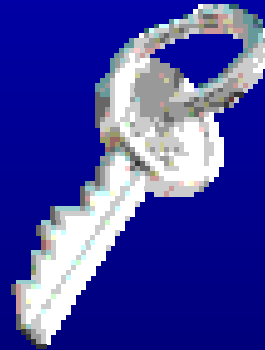
- **ARE**
 - **Non-native**
 - **Limited Distribution in portions of the state**
 - **Designated areas of control**
- **Goal**
 - **Prevention of new infestations in Designations**
 - **Control is decided at the local level**

CLASS “C” WEEDs

- **ARE**
 - **Non-native**
 - **Widespread Distribution**
- **Goal**
 - **Long-term suppression**
 - **Control is decided at the local level**



Key To Weed Control



Identification

Weeds around the area

Oxeye Daisy

Leucanthemum vulgare

- **Perennial herb**
- **Flowers**
 - showy,
 - white ray flowers and numerous
 - bright yellow disk flowers
- **leaves**
 - alternate and lack stalks
 - they are lance-shaped
 - coarse teeth and often have a few lobes at the base



Oxeye Daisy

Leucanthemum vulgare

- **Habitat**

- wide range of environmental conditions
- native grasslands, overgrazed pastures, waste areas, meadows, railroad rights-of-way, and roadsides

- **Impacts**

- decreasing plant species diversity.
- increases the potential for soil erosion



Knapweeds



Typical diffuse knapweed infestation.



Diffuse

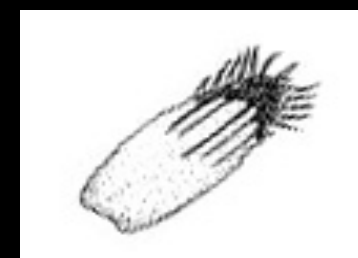
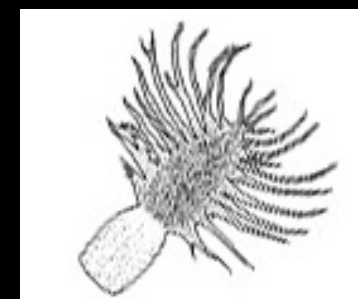
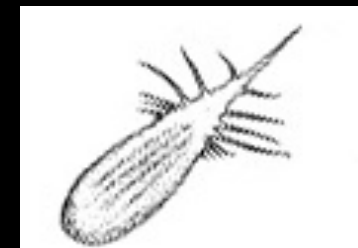


Meadow



Spotted

	Flower	Bracts
Diffuse <i>Centaurea diffusa</i>	White, rose, or purple	Covered with “comb-like” spines
Meadow <i>Centaurea jacea</i> x <i>nigra</i>	Solitary, globe-shaped heads; rose to purple	Fringes gold to dark brown, about the width of the bract and rounded at the tip
Spotted <i>Centaurea biebersteinii</i>	Solitary; purple, pink or sometimes white	Fringed tips dark & short



Knapweeds

- **Habitat**
 - poor soil, dry, damp areas
 - Where ever the seed falls
- **Impact**
 - Increase soil erosion
 - Exuding a “poison”
 - Nutritional sink
 - Shade
 - Fuel for Fires



Non- Native Hawk weeds (*Hieracium spp.*)

- **Perennials**
- **Flowers:**
 - Range from yellow to orange
 - Ray flowers
 - On long Stocks
- **Habitat:**
 - Permanent meadows, grasslands, range & pastures, and Roadsides



Non- Native Hawk weeds

- **Impacts:**
 - **Potential to hybridize with native**
 - **Aggressive competitors of pasture and range plant species.**
 - **unpalatable**
 - **crowds out more palatable species**



Tansy Ragwort

Senecio jacobaea

- **Winter annual
biennial**
- **Flowers**
 - Yellow
 - 13-15
- **Leaves**
 - alternate
 - rosette 1st year



Tansy Ragwort

Senecio jacobaea

- **Habitat**
 - **disturbed sites that includes roadsides, pastures, and forested areas recently harvested for timber**
- **Impacts**
 - **Toxic**
 - **6 alkaloids, accumulate in the liver**
 - **Milk can contain toxins**
 - **3 to 7 percent of their body weight**





Saint Johnswort

(Hypericum perforatum)

- **Perennial herb**
- **Flowers**
 - Yellow
 - 5 petals
- **Leaves**
 - Opposite
 - lance shaped
 - spotted with tiny translucent dots



Saint Johnswort

(Hypericum perforatum)

- **Habitat**
 - **temperate climates**
 - **meadows, dry pastures, rangelands, roadsides, and empty fields**
- **Impact**
 - **dermatitis, inflammation of the mucus membranes, itching, swelling, blisters, and open sores**



Herb Robert

Geranium robertianum L.

B

- **Perennial**
- **Flower**
 - Pink or purple
 - 5-petals
- **Leaves**
 - Basals and opposite
 - Palmately compound, leaflets pinnately lobed and toothed,
 - Strongly aromatic unpleasant aroma



Herb Robert

Geranium robertianum L.

- **Habitat**

- moist forests with canopy closure, in forest gaps and more open canopies, and on dry rocky outcrops

- **Impacts**

- threat to forest understories and plant biodiversity by displacing native species





Scotch broom

Cytisus scoparius

- **Woody perennial shrub**
 - 9 feet tall
- **Flowers**
 - Showy
 - Bright yellow legume like flowers
 - Abundant along the stems
- **Leaves**
 - three parted with simple margins



Scotch broom

- **Habitat**
 - poor, rocky soils
- **Impacts**
 - capable of crowding out desirable native plants
 - potential fire hazard
 - All parts of the plant are poisonous if eaten



Himalayan, Giant & Japanese knotweeds

B

- **Perennial**
 - **Creeping rhizomes**
- **Stems**
 - **Hollow**
 - **7- 10 ft tall**
 - **Weakly woody**
 - **Swollen at nodes**
 - **Usually reddish-brown at maturity**

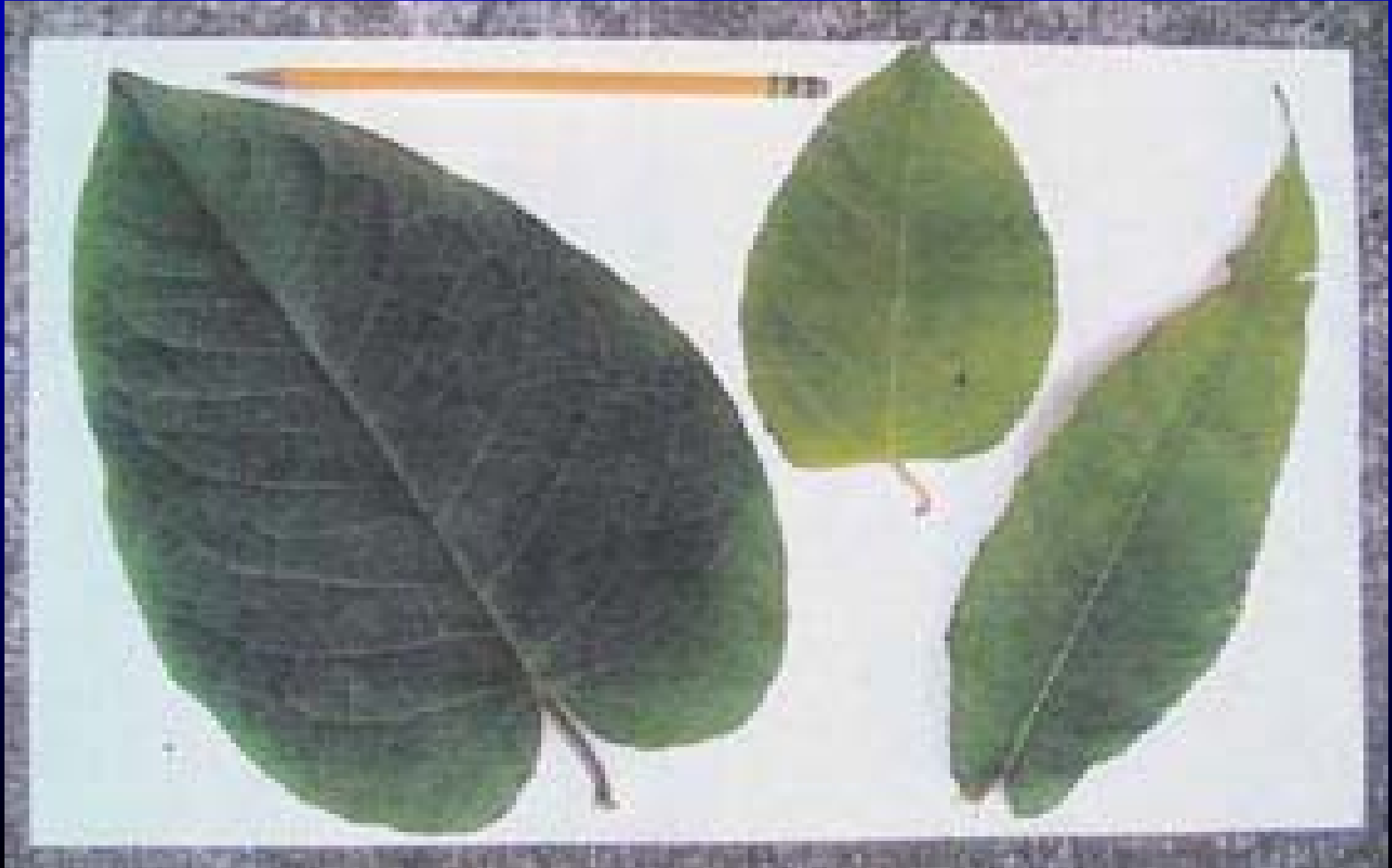


Knotweeds

- **Flowers**
 - Panicles
 - White to pinkish
- **Leaves**
 - Alternate
 - Lanceolate
 - Short hairs



Knotweeds



Knotweeds

- **Habitat**
 - along streams & rivers
 - ditches & ravines
 - moist soils in cool temperate
- **Impacts**
 - invades riparian areas
 - create dense colonies that exclude native vegetation
- **New plants can sprout from fragments as small as 1 inch**



Dalmatian toadflax

Linaria dalmatica

- **Perennial herb**
- **Flowers**
 - bright yellow, tinged with orange
 - resemble snapdragon flowers
- **Leaves**
 - light green, waxy, alternate leaves are heart-shaped and clasp the stem



Yellow Toadflax

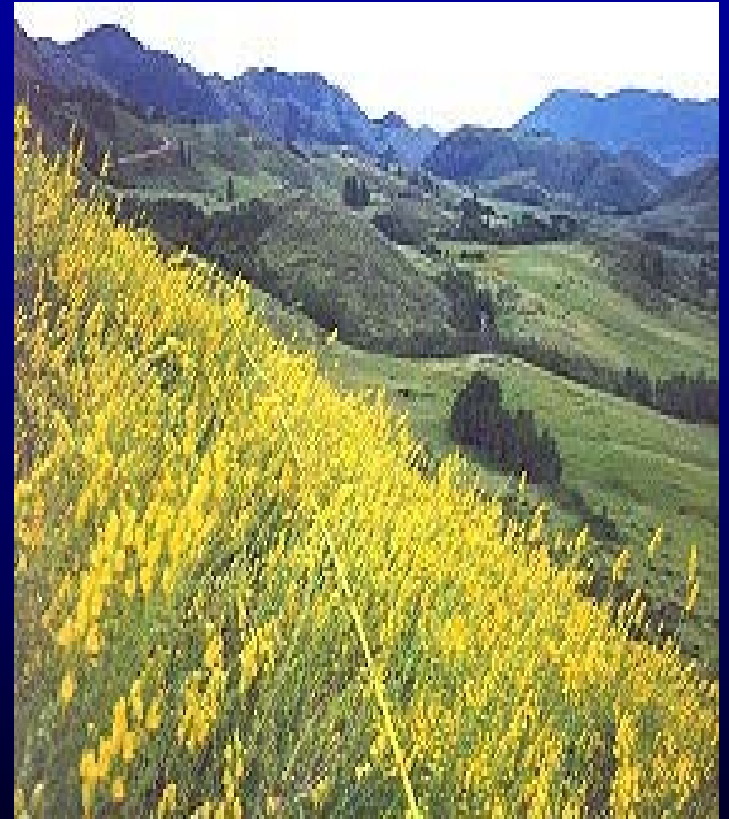
Linaria vulgaris

- **Perennial**
- **Flowers**
 - **Snapdragon type**
 - **yellow (butter) and orange (eggs)**
 - **long with spur**
- **Leaves**
 - **Numerous long and narrow pale green**
 - **smooth and pointed**



Dalmatian & Yellow Toadflax

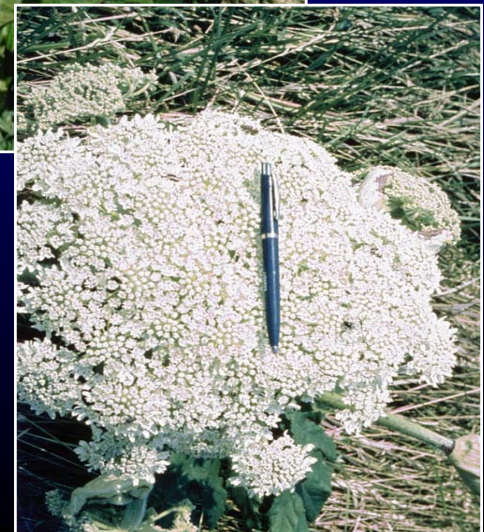
- **Habitat**
 - roadsides, pastures, rangelands, and waste areas
- **Impacts**
 - strongly competitive



Giant Hogweed

A

- **Perennial**
 - tuberous root stalks
- **Flower**
 - broad flat-topped umbel
 - many small white florets
- **Leaves**
 - compound
 - may expand to 5 ft.
 - Each leaflet is deeply incised



Giant Hogweed

- **Habitat**

- wide variety of habitats but is most common along roadsides, vacant lots, streams, and rivers

- **Impacts**

- forms a dense canopy outcompeting native riparian species
 - increase in soil erosion on stream banks
 - sap which causes severe burns



Poison hemlock

Conium maculatum

C

- **Tall biennia 6-8 feet tall**
- **Flowers**
 - Small, white,
 - in large umbels
- **Leaves**
 - Large, alternate, dark green on the upper surface.
 - Fern-like, two to three times pinnately divided, deeply lobed.



Poison hemlock

- **Habitat**
- **poorly drained soils, near streams, ditches, and other surface water**
- **Impacts**
 - **invades grazing areas**
 - **out-compete more desirable native species**
- **Stems are purple-spotted with distinct ridges**
- **All parts of the plant are poisonous**



Cow-parsnip

Heracleum lanatum

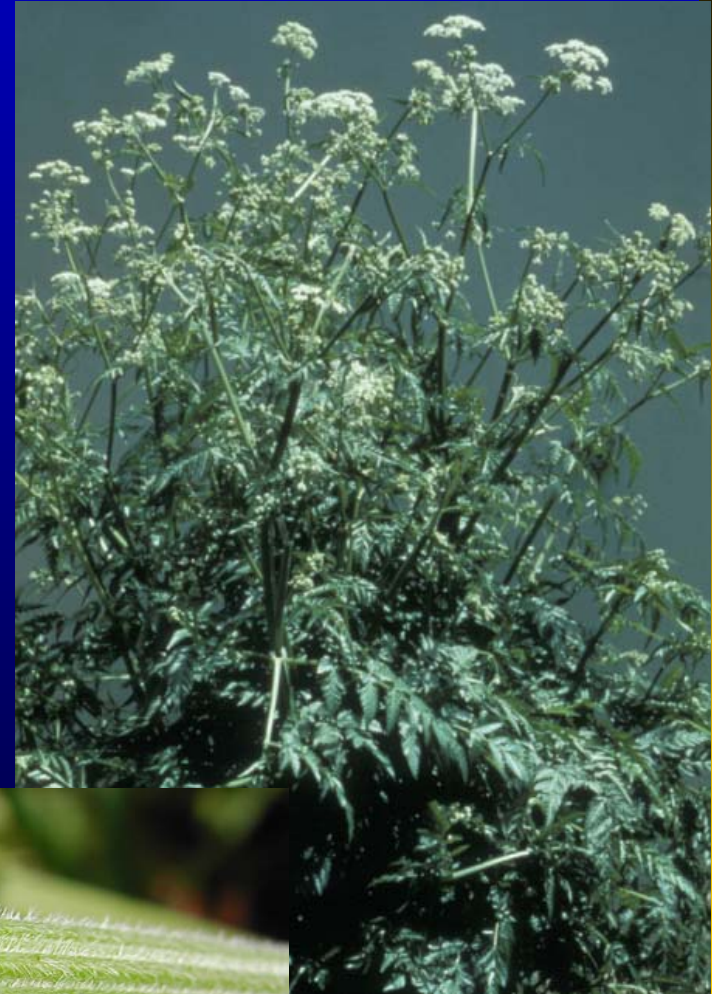
N

- **A native, perennial forb, 3'-10' tall**
- **Flowers**
 - white/cream
 - flat-topped
- **Leaves**
 - rough/hairy,
 - palmately compound, large,
 - leaflets toothed.
- **Stem rough/hairy, hollow, grooved.**



Wild chervil

- **Biennial**
- **Flowers**
 - White
 - Small
- **Leaves**
 - two to three pinnate
- **Habitat**
 - Hedgerows, edges of woods, wasteplaces



Bur-chervil

Anthriscus caucalis

- **Biennial**
- **Flowers**
 - White
 - Small
- **Leaves**
 - two to three pinnate
- **Habitat**
 - Hedgerows, edges of woods, wasteplaces



Garlic mustard

Alliaria petiolata

- **Biennial herb**
- **Flowers**
 - buttonlike clusters of small white each with four petals
- **Leaves**
 - coarsely toothed
 - triangular to heart-shaped
 - give off an odor of garlic when crushed



Garlic mustard

Alliaria petiolata

- **Habitat**

- occurs in moist, shaded soil of river floodplains, roadsides, trails edges and forest openings
- Disturbed areas

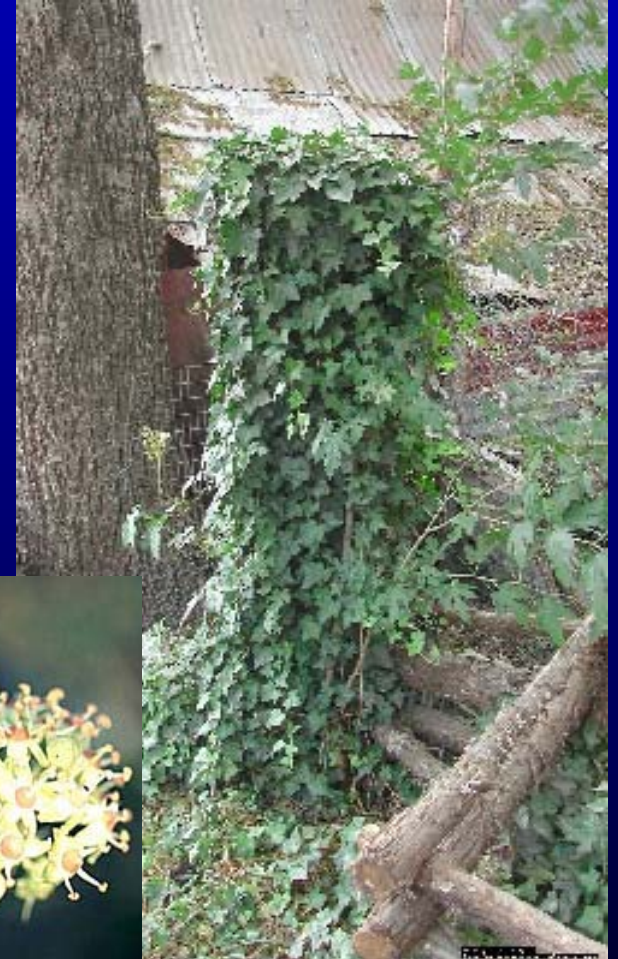
- **Impacts**

- Garlic mustard poses a severe threat to native plants and animals in forest
- out competes springtime natives



English Ivy (*Hedera helix*)

- **Woody Evergreen Perennial**
- **Flowers:**
 - Small
 - Greenish-white flowers
 - Umbrella-like clusters
 - Appearing in the Fall



English Ivy

- **Leaves:**
 - **Alternate**
 - **Leathery**
 - **With long petioles**
 - **Juvenile plants: deeply lobed 3 to 5**
 - **Older stems: primarily unlobed and are ovate to rhombic**



English Ivy

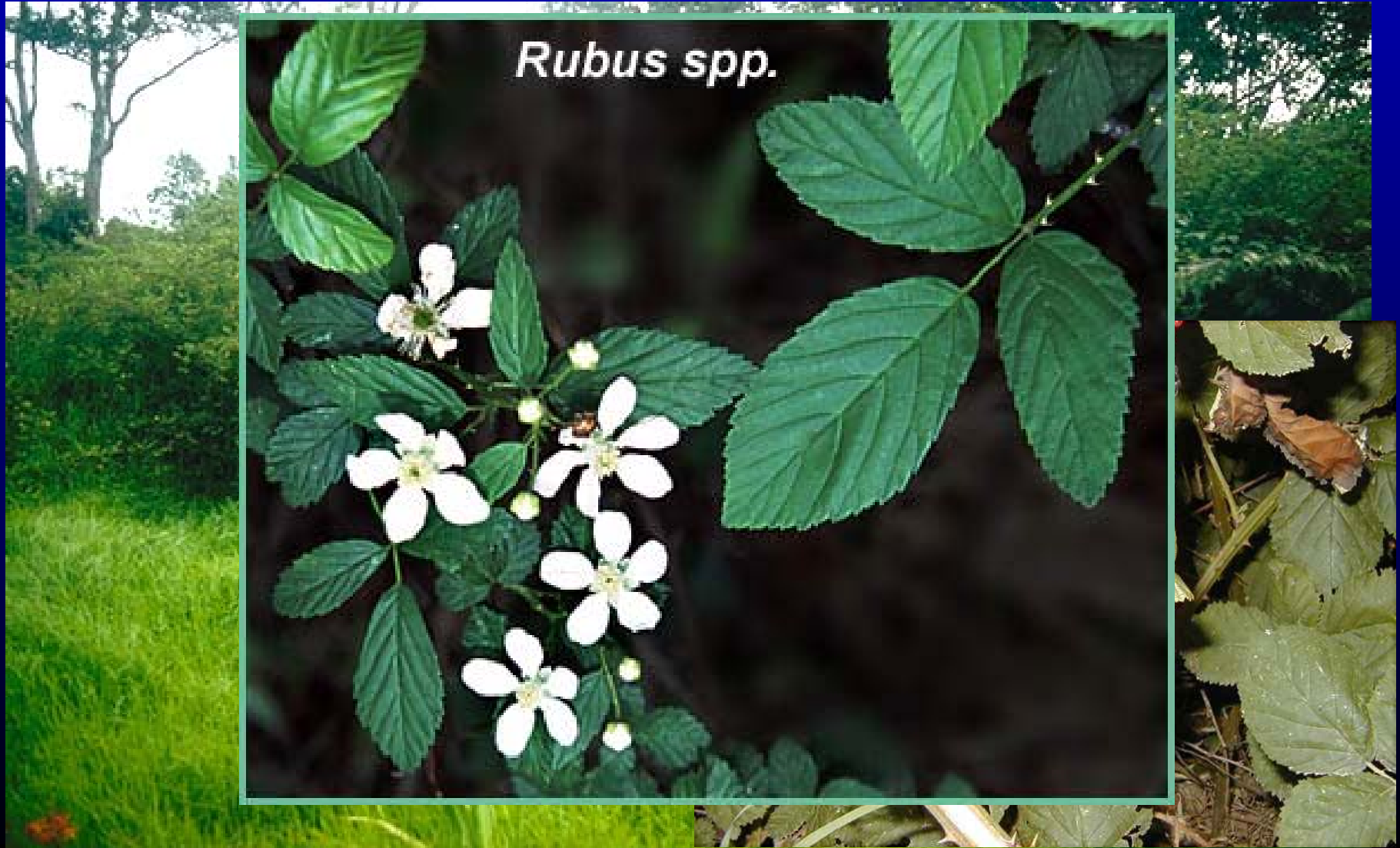
- **Habitat:**
 - Landscaped areas
 - Wooded understory
- **Impacts:**
 - Spreads in to shaded forested lands smothering the understory and trees.



Obnoxious Weeds

Blackberry

Rubus spp.



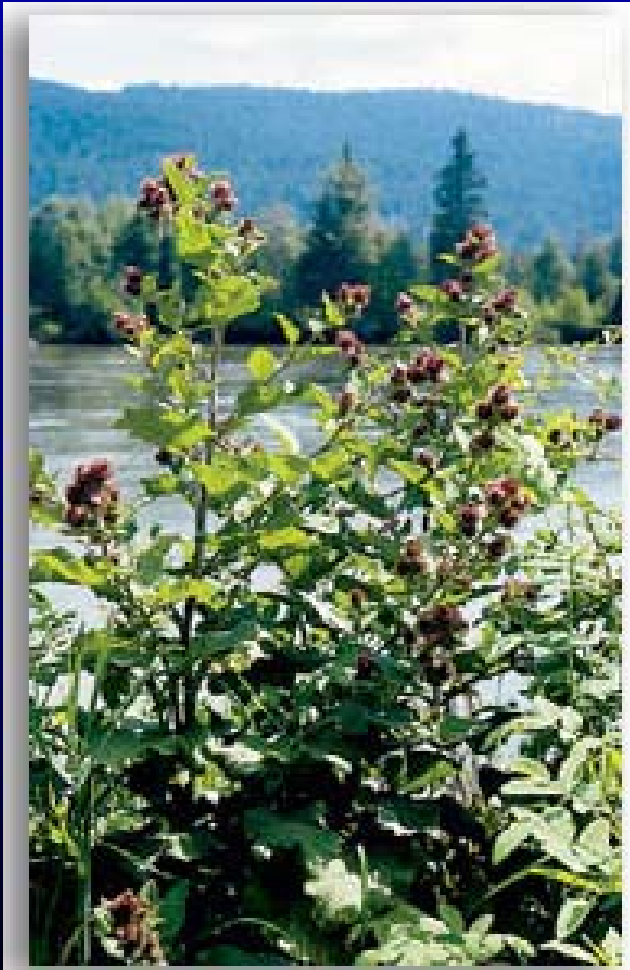
Blackberry

Rubus spp.

- **Perennial bush**
- **Leaves are oblong, pointed at the tip, and have saw like edges.**
- **The flowers are usually white and about one inch in diameter**

Common Burdock

Arctium minus



© Copyright Peter Sforza

Common Burdock

Arctium minus

- Biennial growing 2-6 feet tall
- Produces the prickly burrs that so easily attach to clothing and animals
- The leaves are alternate, dark green, smooth above, whitish green, and woolly-hairy beneath.
- The flowers are purple or white in numerous heads. The head is enclosed in a prickly bur

Field Horsetail

Equisetum arvense



Field Horsetail

Equisetum arvense

- Native perennial
- Leafless
- Produce whorls of green, four-angled leaf-like branches
- No Flowers, reproduces by spores

Teasel

Dipsacus sylvestris



Teasel

Dipsacus sylvestris

- Biennials, From 3 to 10 feet tall.
- Leaves are long lance, prickly, in pairs, large and sometimes fused around the stem. Stem is prickly also.
- Flowers may be blue pink or white, flowers start blooming in the middle of the flowering head and spread outward and downward.

Butterfly Bush, Summer Lilac

Buddleia



Butterfly Bush, Summer Lilac

Buddleia

- Deciduous Woody shrub, 10-12 ft
- leaves are lance-shaped gray-green on long arching stems
- Tiny flowers borne in long (8-18"), cone-shaped clusters that droop

Review

- **Common noxious weed characteristics:**
 - Non- Native
 - Perennials
 - Produce mass quantities of seeds
 - Vegetative reproduction
 - Crowd out other species
 - Difficult to control

Review

**How do you know if a plant
is a Noxious weed?**

**Contact your local or state
weed board!!!**



Questions?



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